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C. List of Claims

 (Original) A method of making a radioactive source, comprising:

forming a polymer layer on a substrate material, the formation being substantially free of inorganic polymers, and;

exposing the polymer layer to a radioactive isotope so that the radioactive isotope is adsorbed in the layer.

- 2. (Original) The method according to claim 1, further comprising the step of providing a substrate material.
- 3. (Original) The method according to claim 2, wherein the step of providing a substrate material comprises providing a polymer substrate material.
- 4. (Original) The method according to claim 3, wherein the step of providing a polymer substrate material comprises providing a substrate material of polyethylene terephtalate.
- 5. (Original) The method according to claim 2, wherein the substrate material is in the form of an inflatable balloon.

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- 6. (Original) The method according to claim 2, wherein the substrate material is in the form of a wire.
- 7. (Original) The method according to claim 1, wherein the step of forming a layer of polymer comprises forming a layer of hydrogel.
- 8. (Original) The method according to claim 2, further comprising the step of treating the substrate material oxygen plasma to obtain a hydrophilic surface, before the step of forming a polymer layer.
- 9. (Original) The method according to claim 1, wherein the step of exposing comprises exposing the polymer layer to a ^{32}P radioisotope.
- 10. (Original) The method according to claim 9, wherein the step of exposing comprises exposing the polymer to phosphoric acid.
- 11. (Original) The method according to claim 1, wherein the step of exposing comprises exposing the polymer layer to a ⁹⁰Y radioisotope.

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- 12. (Original) The method according to claim 11, wherein the step of exposing comprises exposing the polymer to a solution of $YC1_3$.
- 13. (Original) The method according to claim 1, wherein the step of exposing comprises exposing the polymer layer to a 144 Ce radioisotope.
- 14. (Original) The method according to claim 13, wherein the step of exposing comprises exposing the polymer to a solution of $CeCl_3$.
- 15. (Original) The method according to claim 1, wherein the step of exposing comprises exposing the polymer layer to a 188 Re radioisotope.
- 16. (Original) The method according to claim 1, further comprising the step of coating the exposed layer with a sealant.
- 17. (Original) The method according to claim 16, wherein the step of coating comprises coating the exposed layer with a polymer sealant.

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- 18. (Original) The method according to claim 16 wherein the step of coating comprises coating the exposed layer with poly (stylene-acrylic acid).
- 19. (Original) The method according to claim 16, wherein the step of coating comprises coating the exposed layer with a poly urethane solution.
- 20. (Original) The method according to claim 16, wherein the step of coating comprises coating the exposed layer with a polyether based aliphatic polyurethane resin.
- 21. (Original) The method according to claim 16, wherein the step of coating comprises coating the exposed layer with an AST-B (poly (stylene-polyurethane) solution and then coating with a polycarbonate based aliphatic polyurethane solution.
- 22. (Original) A method for making a radioactive source comprising:

forming an organic polymer layer on a substrate material; and

exposing the substrate material to a radioactive isotope so

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that the radioactive isotope is absorbed in the layer.

- 23. (Original) The method according to claim 22, further comprising the step of providing a substrate material of polymer.
- 24. (Original) The method according to claim 22, further comprising the step of coating the exposed layer to seal the radioactive isotope.
- 25. (Original) A method for making a radioactive source comprising:

providing a substrate material;

forming a layer of organic polymer material on the substrate material;

exposing the polymer layer to a radioactive isotope material so that the radioactive isotope is adsorbed in the layer; and

coating the exposed layer to seal the radioactive isotope material.

26. (Original) A method for making a radioactive source for treating a patient, comprising:

providing a polymer substrate material;

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forming a polymer layer of organic on the substrate material; and exposing the substrate material to a radioactive isotope so that the radioactive isotope is absorbed in the layer.

- 27. (Original) A product made according to the method of claim
 1.
- 28. (Original) A product made according to the method of claim 22.
- 29. (Original) A product made according to the method of claim 25.
- 30. (Original) A product made according to the method of claim 26.
- 31. (Withdrawn) A radioactive source, comprising:
 - a substrate material;
 - a layer of polymer material substantially free of inorganic polymers on the substrate material; and
 - a radioactive isotope adsorbed in the layer.

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- 32. (Withdrawn) A radioactive source, comprising:
 - a substrate material;
 - a layer of polymer material substantially free of inorganic polymers on the substrate material;
 - a radioactive isotope adsorbed in the layer; and
 - a coating on the layer to seal the radioactive isotope.
- 33. (Withdrawn) A radioactive source, comprising:
 - a polymer substrate material;
 - a layer of polymer material on the substrate material;
 - a radioactive isotope adsorbed in the layer; and
 - a coating on the layer to the radioactive isotope.
- 34. (Withdrawn) A radioactive source, comprising:
 - a polymer substrate material;
 - a layer of polymer material substantially free of inorganic polymers on the substrate material;
 - a radioactive isotope adsorbed in the layer; and
 - a coating on the layer to seal the radioactive isotope.